

AUG 11 2006

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Hans-Heinrich GATZEN  
Serial No.: 10/540,119  
Filed: June 20, 2005  
For: READ-WRITE HEAD WITH INTEGRATED MICROACTUATOR  
Art Unit: 2627  
Examiner: Not Yet Assigned  
Confirmation No.: 8882  
Customer No.: 27623 Attorney Docket No.: 2133.099USU

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

## REQUEST FOR CORRECTED FILING RECEIPT

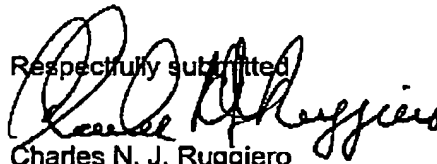
Dear Sir:

The applicant is requesting that correction be made to the filing receipt. Please note that "Hans-heirich Gatzen, Aptos, Germany" should read: **Hans-Heinrich Gatzen, Aptos, San Jose, California** as stated on the Declaration.

Also, please note that the "Title" should read: **READ-WRITE HEAD WITH INTEGRATED MICROACTUATOR** as stated on the first page of the specification filed on June 20, 2005. A copy of the original marked-up filing receipt and a copy of the first page of the specification are enclosed.

Please charge any additional fees or credit any such fees, if necessary to Deposit Account No. 01-0467 in the name of Ohlandt, Greeley, Ruggiero & Perle. A duplicate copy of this sheet is attached.

Respectfully submitted



Charles N. J. Ruggiero  
Reg. No. 28,468  
Ohlandt, Greeley, Ruggiero & Perle, L.L.P.  
One Landmark Square, 10th Floor  
Stamford, Connecticut 06901-2682  
(203) 327-4500

Date: August 11, 2006

## CERTIFICATE OF TRANSMISSION

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING FACSIMILE TRANSMITTED TO THE FACSIMILE NUMBER 571-273-8300, 10 total pages, c/o MAIL STOP Amendment, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450, ON August 11, 2006.

Ruth J. Olivo



August 11, 2006

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Ruth J. Olivo

NAME



August 11, 2006



## UNITED STATES PATENT AND TRADEMARK OFFICE

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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/540,119	03/09/2006	2627	1865	2133.099USU	13	38	1

27623

OHLANDT, GREELEY, RUGGIERO & PERLE, LLP  
ONE LANDMARK SQUARE, 10TH FLOOR  
STAMFORD, CT 06901

CONFIRMATION NO. 8882

## FILING RECEIPT

\*OC000000019661576\*

Date Mailed: 07/25/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

~~Hans-Heinrich Gatzert, Aptos, GERMANY,~~

Hans-Heinrich Gatzert,  
Aptos, San Jose, California

Power of Attorney: The patent practitioners associated with Customer Number 27623.

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/EP03/14319 12/16/2003

## Foreign Applications

GERMANY 102 60 009.0 12/18/2002

If Required, Foreign Filing License Granted: 07/18/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/540,119**

Projected Publication Date: 10/26/2006

Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*

Title

RECEIVED  
JUL 27 2006  
OFFICE OF GREELEY  
RUGGIERO & PERLE, LLP

~~Write/read head provided with an integrated microactuator~~

Read-Write Head with Integrated Microactuator

Preliminary Class

360

## PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process simplifies the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

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Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

#### GRANTED

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**DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION**

Docket No. 2133.099USU  
Customer No.: 27623

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor of the subject matter that is claimed and for which a patent is sought on the invention entitled:

**READ-WRITE HEAD WITH INTEGRATED MICROACTUATOR**

the specification of which

(check one) ☐ is attached hereto.

☒ was filed on June 20, 2005 as Application Serial No. 10/540,119  
and was amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to the examination of this application as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a) – (d) or (f) or Section 365(b) of any foreign application(s) for patent or inventor's or plant breeder's rights certificate(s) or Section 365(a) of any PCT International Application which designated at least one country other than the United States listed below and have also identified below, by checking the box, any foreign application(s) for patent or inventor's certificate(s) or PCT International application having a filing date before that of the application on which priority is claimed:

**Prior Foreign Application(s)**

**Priority Claimed**

<u>10260009.0</u> (Number)	<u>Germany</u> (Country)	<u>18/December/2002</u> (Day/Mon/Year Filed)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
_____ (Number)	_____ (Country)	_____ (Day/Mon/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____ (Number)	_____ (Country)	_____ (Day/Mon/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the

8. DEZ. 2005 10:46

NR. 6864 S. 3/4

first paragraph of Title 35, United States Code, §112, we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>(Application Serial No.)</u>	<u>(Filing Date)</u>	<u>(Status - patent, pend., abandon.)</u>
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<u>(Application Serial No.)</u>	<u>(Filing Date)</u>	<u>(Status - patent, pend., abandon.)</u>
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I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States provisional application(s) listed below:

<u>(Application Serial No.)</u>	<u>(Filing Date)</u>	<u>(Status - patent, pend., abandon.)</u>
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<u>(Application Serial No.)</u>	<u>(Filing Date)</u>	<u>(Status - patent, pend., abandon.)</u>
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POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

NAMES	REGISTRATION NUMBERS
Charles N.J. Ruggiero	28,468
Paul D. Greeley	31,019

SEND CORRESPONDENCE TO:	DIRECT TELEPHONE CALLS TO:
Charles N.J. Ruggiero, Esq. Ohlandt, Greeley, Ruggiero & Perle, L.L.P. One Landmark Square, 10 <sup>th</sup> Floor Stamford, Connecticut 06901-2682	Charles N.J. Ruggiero, Esq. Telephone: (203) 327-4500 Telefax: (203) 327-6401

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

8. DEZ. 2005 10:46

NR. 6864 S. 4/4

FULL NAME OF INVENTOR	LAST NAME GATZEN	FIRST NAME Hans-Heinrich	MIDDLE NAME
RESIDENCE & CITIZENSHIP	CITY Isernhagen APROS	STATE OR COUNTRY Germany USA	CITIZENSHIP DE
POST OFFICE ADDRESS	P.O. ADDRESS Teichhuhweg 36 P.O. BOX 9771	CITY & STATE Isernhagen SAN JOSE	ZIP CODE 30916 CA 95157

H6 21.11.05

Inventor's signature

Hans-Heinrich Gatzen  
HANS-HEINRICH GATZENDate 26-Nov-2005, 2005



PCT/EP03/14319  
Gatzen, Hans-Heinrich pr

02GAT0456WOP

## Read-Write Head with Integrated Microactuator

### Description

The invention in general concerns read or read and write  
5 heads for data storage devices, in particular with an  
integrated microactuator for fine positioning.

Due to increasing storage density, the requirements for track  
following of read-write heads on data tracks on which data  
10 are stored digitally, for instance in form of magnetic flux  
changes, are increasing as well. Read-write heads are used in  
all magnetic mass storage devices like hard disk drives,  
diskette drives, and tape files. In case of hard disk drives,  
a positioner accomplishes the track access to a data track as  
15 well as track following thereon. All read write arms are  
mounted to it, with each write-head arm covering one disk  
surface. Thereby, the data tracks are arranged concentrically  
on the disc surfaces. The positioner's actuator is positioned  
by a servo system such that the respective read-write head in  
20 use is guided on a data track. Typically, at any point in  
time, only one read-write head writes or reads.

With increasing recording density, both the distances between  
flux reversals as well as the width of the magnetic data  
25 tracks are decreasing. For accomplishing the required  
positioning on the data track, a second stage actuator could  
be integrated in the read-write head to gain more accurate  
and higher frequency track following than possible with  
existing actuators. Concepts for the design of such actuators